

Notice of Allowability

Application No.

09/869,967

Applicant(s)

MASUBUCHI ET AL.

Examiner

Justin R Fischer

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 30 September 2004.
2. ☒ The allowed claim(s) is/are 1,2,4,5,7-32 (renumbered 1-30).
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Allowable Subject Matter

1. Claims 1, 2, 4, 5, and 7-32 (renumbered 1-30) are allowed. The following is an examiner's statement of reasons for allowance:

It is well known to form a steel cord with a core strand and a plurality of sheath strands, wherein each of said strands is formed by twisting a plurality of filaments, as shown for example by Ikehara (JP 08081889), Amamiya (JP 5-338753), Bruyneel (US 5,461,850), and Morgan (US 6,272,830). These references recognize the use of single and multiple sheath layers to define the core strands and sheath strands, respectively, and furthermore, the references disclose the use of single or multiple filaments to define the core of the core strands and sheath strands, respectively. However, the prior art references of record fail to suggest, disclose, or teach the plurality of steel cord constructions (and thus the associated tire design) defined by the claimed invention. For example, while Morgan discloses an embodiment in which the filaments of the outer sheath layer (in each of the core and sheath strands) are larger than the filaments of the core (in each of the core and sheath strands), this embodiment does not contain multiple sheath layers as is required by the claimed invention. On the other hand, while Amamiya and Ikehara disclose an embodiment in which the filaments of the outer sheath layers (in a multiple sheath layer arrangement) are larger than the filaments of the core, the filaments of the outer sheath layers are not larger than the filaments of the inner sheath layer as is required by the claimed invention. Thus, one of ordinary skill in the art at the time of the invention would not have found it obvious to make a steel cord

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comprising the combination of forming a core and/or sheath strand with a multi-sheath layer design and forming the filaments of the outermost sheath layer with a larger diameter than the inner sheath layer and core, respectively.

Additional reasons for allowance (regarding other claims) have been previously set forth in the Non-Final Rejection mailed on October 10, 2003 (Paragraph 11).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Justin Fischer

October 28, 2004



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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700